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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/522,464	01/26/2005	Stephane Auberger	FR 020079	6149	
	7590 10/06/200 LLECTUAL PROPER	EXAMINER			
P.O. BOX 3001		REKSTAD, ERICK J			
BKIAKCLIFF	MANOR, NY 10510		ART UNIT	PAPER NUMBER	
		2621			
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			10/06/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Application No.		Applicant(s)					
		10/522,464		AUBERGER ET AL.					
			Examiner		Art Unit				
			ERICK REK	STAD	2621				
Period fo	The MAILING DATE of this commui r Reply	nication appe	ears on the c	over sheet with the c	orrespondence ad	ddress			
WHIC - Exten after 9 - If NO - Failur Any re	DRTENED STATUTORY PERIOD F HEVER IS LONGER, FROM THE IN sions of time may be available under the provision: SIX (6) MONTHS from the mailing date of this com- period for reply is specified above, the maximum s e to reply within the set or extended period for reply eply received by the Office later than three months d patent term adjustment. See 37 CFR 1.704(b).	MAILING DA s of 37 CFR 1.136 munication. tatutory period wil y will, by statute, c	TE OF THIS 6(a). In no event, Il apply and will e cause the applica	COMMUNICATION however, may a reply be tim kpire SIX (6) MONTHS from tion to become ABANDONE	N. nely filed the mailing date of this of (35 U.S.C. § 133).				
Status									
1) 又	Responsive to communication(s) file	ed on <i>26 Jar</i>	nuary 2005						
•	•	2b)⊠ This a		-final.					
—		<i>′</i> —			secution as to the	e merits is			
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
	on of Claims			,					
· _		nnligation							
, —	Claim(s) <u>1-7</u> is/are pending in the application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.								
•	5) Claim(s) is/are allowed.								
	Claim(s) <u>1-7</u> is/are rejected.								
•	Claim(s) is/are objected to.	<i>c</i>							
8)[Claim(s) are subject to restri	ction and/or	election req	uirement.					
Application	on Papers								
9) 🗆 -	The specification is objected to by th	ne Examiner.							
10) 🔲 -	The drawing(s) filed on is/are	: а)[] ассеј	pted or b)	objected to by the B	Examiner.				
	Applicant may not request that any obje	ection to the di	rawing(s) be	neld in abeyance. See	e 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including	g the correctio	on is required	if the drawing(s) is obj	ected to. See 37 C	FR 1.121(d).			
11) 🔲 -	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority u	nder 35 U.S.C. § 119								
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 									
2) Notice 3) Inform	e of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (Ination Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date	PTO-948)	4 5 6	T =	nte				

DETAILED ACTION

This is a non-final Office Action for application no. 10/522,464 filed on January 26, 2005.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 4 and 5 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The relevant portions of the USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility (Official Gazette Notice of 22 November 2005), Annex IV, read as follows:

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 2583-84, 32 USPQ2d at 1035.

Claims that recited nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, *per se*, and as such are nonstatutory natural phenomena. See *O'Reilly*, 56 U.S. (15 How.) at 112-114. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.

...a signal does not fall within one of the four statutory classes of Sec. 101.

...signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.

Claims 4 and 5 are drawn to a "computer program product" storing functional descriptive material. The specification (Page 7 Line 32-Page 8 Line 4), defines the claimed "computer program product" as encompassing statutory material such as a

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"memory" or a "disc", as well as *non-statutory* subject matter such as "communication network". The "communication network" is defined as a carrier signal.

Claims 4 and 5 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

A signal embodying functional descriptive material is neither a process nor a product (i.e., a tangible "thing") and therefore does not fall within one of the statutory classes of §101. Rather, a "signal" is a form of energy, in the absence of any physical structure or tangible material. See *In re Nuijten*, 84 USPQ2d 1495 (Fed. Cir. 2007, *en banc* denied 2008, *writ cert.* pending). Because the full scope of the claims as properly read in light of the disclosure encompasses non-statutory subject matter, the claims as a whole are non-statutory.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005 http://www.uspto.gov/web/offices/com/sol/og/2005/week47/og200547.htm), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claim(s) 4 and 5 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 4 and 5 defines a computer program product embodying functional descriptive material. However, the

claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" - Guidelines Annex IV). That is, the scope of the presently claimed computer program product can range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to embody the program on "computer-readable medium" or equivalent in order to make the claim statutory. An example of a proper preamble for a computer program claim is "A computer-readable medium encoded with a computer program representing instructions to cause a computer to:".

Any amendment to the claim should be commensurate with its corresponding disclosure.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

[claim 1]

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by 'Encoding and Reconstruction of Multiview Video Objects' by Ohm. Ohm teaches the use of the MPEG-4 compression standard for encoding digital video sequences comprising some sets of images including a disparity map, said disparity map being used to reconstruct one image of a set of images from a reference image of said set of images, characterized in that the method comprises the steps of: Encoding a type of the disparity map to be used for the reconstruction of an image and encoding the disparity map (Compression of Multiple Views, The "Incomplete-3D" Technique). Note, Ohm teaches the encoding of the type "areas of interest" as MPEG-4 video objects and the encoding of the disparity maps as auxiliary components. [claims 2 and 3]

As shown above the disparity type is encoded as video objects. The MPEG-4 standard defines video objects as having a tag (header) and parameters (video object data) thus such features are inherent in the defining of the above disparity type.

[claims 4-7]

As shown in Figures 1 and 2 along with the above citation, Ohm discloses the use of an encoder, decoder and software for performing the operations of claim 1 as required by the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERICK REKSTAD whose telephone number is (571)272-7338. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Erick Rekstad/ Examiner (Partial Signatory Authority), Art Unit 2621